

## **Allowance of Application # 10/773,261**

1. The following communication is in response to applicant's amendment received 22-August-2008. Claims 1-17 and 19-21 are pending in the application. Claim 18 is canceled.

## **Examiner's Amendment**

2. An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 C.F.R. 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the Issue Fee. Authorization for this Examiner's Amendment was given by Frederick Cooperrider (Reg. No. 36,769) on 8-December-2008.

### **2.1 In the Claims:**

Claim 1	line 3	Change "for a process," to --for a process to be executed on a computer, --.
Claim 9	line 2	Change "instructions executable by a digital processing apparatus to perform" to --instructions, which when executed by a digital processing apparatus, perform--.
Claim 14	line 2	After "comprising:" add --a computer connected to a memory;--.
	line 4	Change "problem; and " to --problem; a calculator to determine which point on said periphery provides a global solution to said minimum-maximum problem; and--.
	line 6	Change "a memory" to --said memory--.
Claim 18		Cancel claim 18

## Reasons for Allowance

3. The following is an Examiner's Statement of Reasons for the indication of allowable subject matter.

3.1 Claims 1-17 and 19-21 are considered allowable, since when reading the claims in light of the specification, as per MPEP § 2111.01, none of the references of record alone or in combination disclose or suggest the combination of limitations specified in independent claims nos. 1, 5, 8, 9, 13, and 14, including: in regard to claim 1, for a process, wherein is defined a linear functional form  $y = f(X, c)$ , where  $X$  comprises a set of independent variables  $X = \{x_1, \dots, x_n\}$ ,  $c$  comprises a set of functional parameters  $c = \{c_1, \dots, c_n\}$ , and  $y$  comprises a dependent variable, where the independent variables set  $X$  is partitioned into two subsets,  $X_1$  and  $X_2$ , receiving data for said process [defined at p. 4, Ins. 4-13]; minimizing  $y$  with respect to  $X_1$  [p. 4, Ins. 11]; and maximizing  $y$  with respect to  $X_2$  [p. 4, Ins. 11], subject to a set of constraints, wherein said maximizing  $y$  comprises a global optimum for said process [p. 4, Ins. 12-13]; and sending said global optimum to at least one of a display device, a printer, and a memory [p. 17 Ins. 20 through p. 18, Ins. 7].

Dependent claims 2-4, 6, 7, 10-12, 15-17 and 19-21 are deemed allowable as depending either directly or indirectly from independent claims 1, 5, 8, 9, 13, and 14.

3.2 The instant application is directed to a non-obvious improvement over the invention described in USP 6,496,741, issued to Whiffen, which discloses a method for optimizing a useful objective function with respect to a dynamic parameter vector and a static parameter vector, and more particularly, to optimizing a spacecraft objective such as a spacecraft

trajectory objective and a spacecraft design objective. Whiffen does not find a global optimum to a minimum-maximum problem by first calculating a plurality of minimum values and then using these minimum values to locate the global optimum value, as is claimed in the present invention.

**3.3** The art of record, either individually or in combination, fails to teach, suggest, or render obvious the specific arrangement of elements in the same combination as now required by the amended claims. In view of the foregoing, the claims of the present application are found to be patentable over the prior art.

## **Response Guidelines**

**4.** Any comments considered necessary by applicant **MUST** be submitted no later than the payment of the Issue Fee and, to avoid processing delays, should preferably accompany the Issue Fee. Such submissions should clearly be labeled "Comments on Statement of Reasons for Allowance".

**4.1 Any response to the Examiner in regard to this allowance should be**

**directed to:** Russell Frejd, telephone number (571) 272-3779, Monday-Friday from 0530 to 1400 ET, **or** the examiner's supervisor, Kamini Shah, telephone number (571) 272-2279. Inquires of a general nature or relating to the status of this application should be directed to the TC2100 Group Receptionist (571) 272-2100.

**mailed to:** Commissioner of Patents and Trademarks  
P.O. Box 1450, Alexandria, VA 22313-1450

**or faxed to:** (571) 273-8300

Hand-delivered responses should be brought to the Customer Service Window, Randolph Building, 401 Dulany Street, Alexandria, VA, 22314.

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**Date:** 8-December-2008

/Russell Frejd/  
Primary Examiner AU 2128